

Pacific NW Spotter Newsletter

www.weather.gov/Portland

VOL 4, ISSUE 2
SEPTEMBER 2005

Tsunami Scare

The evening of Tuesday, June 14th was beautiful for late spring along the coasts of Washington and Oregon. Then, at 7:51 pm, a magnitude 7.2 earthquake shook the sea floor 85 miles northwest of Eureka, California. This prompted the issuance of a Tsunami Warning for the entire US West Coast from the Alaska Tsunami Warning Center, and it also prompted the evacuation of most coastal cities in Washington and Oregon.

Scientists have known for decades that destructive tsunamis have affected our coast. However, not since the 1960's has a damaging tsunami occurred. Nevertheless, tsunamis pose an ever real danger to our coastline, regardless of their infrequency. As was proven in the massive Indian Ocean tsunami of December 2004, it only takes one event to cause catastrophic damage. Coastal residents need to heed any tsunami warning issued.

Fortunately, a damaging tsunami did not occur June 14th. Many valuable lessons were learned from what turned out to be an important real-time warning exercise. Initially, there was some confusion what this warning actually meant. Was I supposed to evacuate? And where should I go? Communities participating in the Tsunami Ready program generally responded quickly and most efficiently. However, problems with evacuating so many people from the coast quickly developed. Cars trying to reach higher ground created traffic jams on roads not built to handle such volume. Unfortunately, the lines of cars also lay in the inundation zone, had a large tsunami actually occurred.

Another serious problem encoun-

tered during the tsunami event was a failure of communication equipment to transmit the warning to the people on the coast. The EAS (Emergency Alert System) signal is generated by the National Weather Service, radio, and television stations to warn the public of impending hazards. The signal reaches the coast through a complex series of relays. On the night of the tsunami warning, a couple of the relays failed to clearly transmit the signal to the coast, and many coastal residents never received the warning.

What has been learned from this tsunami event? And, what has been done to fix the problems? First, many of the complex relays that sent the warnings to the coast have been replaced and simplified. Also, there are more backup plans in place to warn of tsunamis, should communication lines fail again. Secondly, the logistics of evacuating so many people from the coastline have forced emergency managers to re-evaluate how to best protect the community. Each city has, or should have, its own plan of evacuation and protection. Be aware of your community plan. In many cases, briskly walking uphill to higher elevations will be quicker than trying to drive. In other cases, you may need to drive along a tsunami evacuation route. If you are unsure of what you should do in the case of a tsunami, contact your local emergency manager now to get information....it may save your life. The time for planning is now...before disaster occurs (see page 6 for an Emergency Preparedness checklist or visit tsunami.gov).

INSIDE THIS ISSUE:

Climate Page	2
Climate Outlook	3
Spotter Corner	4
Spotter Training Sessions	4-5
Emergency Preparedness	6
Spotter Checklist	6

SPECIAL POINTS OF INTEREST:

Trivia : What is the record for the most calendar day precipitation in

- ***Are you ready for the winter severe weather season?***

Please review your spotter materials and call-in criteria, or join us for one of our instructional classes in October and November.

Climate Page

After one of the driest winters in the past 100 years, fears of a devastating spring and summer drought were somewhat alleviated with a slightly wetter than normal spring. Although the precipitation deficits accumulated during the winter months would never be completely replenished, fairly regular rains, especially late in the spring, helped prevent a serious fire threat through the summer months.

Measured Averages & Departures from Normal

		<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>Spring</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>Summer</u>
Astoria	Avg Temp	48.3	49.8	56.4	51.5	58.3	62.0	62.3	60.9
	Departure	+2.3	+1.3	+3.7	+2.4	+1.6	+1.9	+1.5	+1.7
	Precip	7.66	8.32	5.46	21.44	1.67	2.26	0.25	4.18
	Departure	+0.29	+3.39	+2.18	+5.86	-0.90	+1.10	-0.96	-0.76
Portland	Avg Temp	50.0	52.3	60.1	54.1	62.0	70.3	70.7	67.7
	Departure	+2.8	+1.1	+3.0	+2.3	-0.7	+2.2	+2.2	+1.2
	Precip	3.77	3.49	4.34	11.60	2.21	0.41	1.05	3.67
	Departure	+0.06	+0.85	+1.96	+2.87	+0.62	-0.31	+0.12	+0.43
Salem	Avg Temp	48.6	50.2	57.9	52.2	59.7	68.9	68.9	65.8
	Departure	+2.1	+0.2	+2.3	+1.5	-1.5	+2.0	+1.9	+0.8
	Precip	4.15	2.82	4.65	11.62	1.90	0.21	0.05	2.16
	Departure	-0.02	+0.06	+2.52	+2.56	+0.45	-0.36	-0.63	-0.54
Eugene	Avg Temp	49.2	50.0	57.2	52.1	59.3	68.2	68.2	65.2
	Departure	+2.9	+0.2	+2.4	+1.8	-0.9	+2.0	+1.8	+1.0
	Precip	3.57	2.55	3.85	9.97	1.37	0.23	0.38	1.98
	Departure	-2.23	-1.11	+1.19	-2.15	-0.16	-0.41	-0.61	-1.18

Normals for the Autumn and Winter Months

	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>Autumn</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>Winter</u>
Astoria	58.5	52.6	46.6	52.6	42.8	42.4	44.2	43.1
Avg Precip	2.61	5.61	10.50	18.72	10.40	9.62	7.87	27.89
Portland	63.6	54.3	45.8	54.6	40.2	39.9	43.1	41.1
Avg Precip	1.65	2.88	5.61	10.14	5.71	5.07	4.18	14.96
Salem	62.2	52.9	45.2	53.4	40.2	40.3	43.0	41.2
Avg Precip	1.43	3.03	6.39	10.85	6.46	5.84	5.09	17.39
Eugene	61.7	52.6	44.7	53.0	39.5	39.8	42.8	40.7
Avg Precip	1.54	3.35	8.44	13.33	8.29	7.65	6.35	22.29

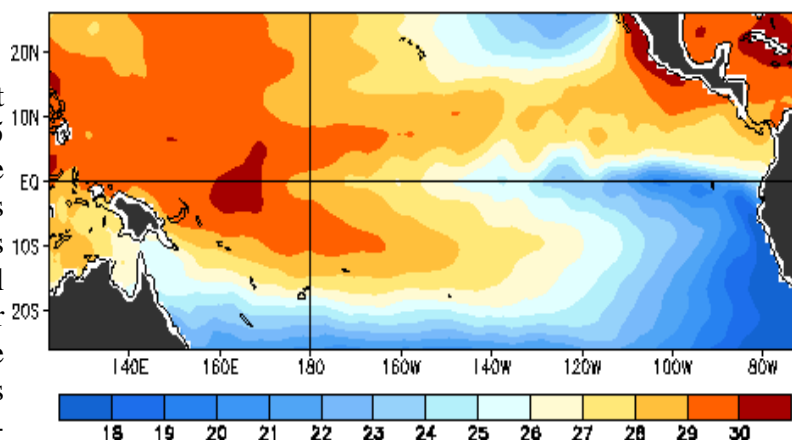
Climate Outlook

The weak El Nino conditions that prevailed during the winter of 2004-05 across the Pacific Northwest have waned. El Nino is officially defined as sea surface temperature anomalies greater than $+0.5^{\circ}\text{C}$ across the central tropical Pacific Ocean. Currently, near neutral conditions are present over the Pacific (i.e. sea surface temperatures are near normal). These neutral conditions are expected to remain intact for the winter of 2005-06.

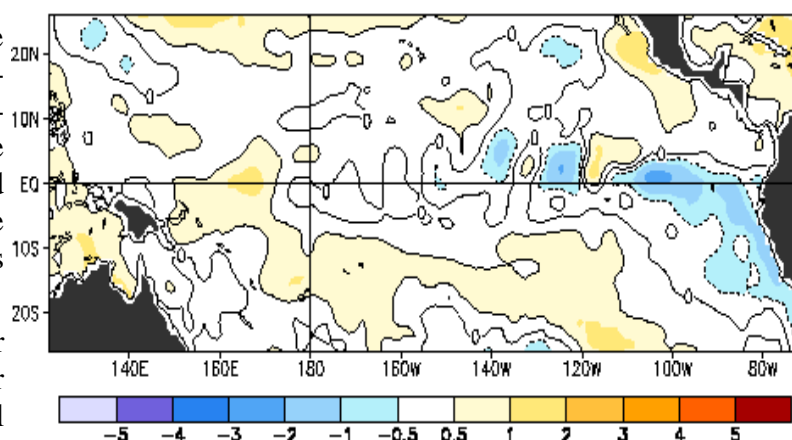
In general, neutral conditions in the tropical Pacific have little definite correlation to overall winter weather conditions in the Pacific Northwest. Some studies have shown, however, that wild swings in weather conditions are more likely during neutral condition winters than either El Nino or La Nina winters.

The official CPC forecast calls for better than normal chances for warmer than normal temperatures, and equal chances for above, below, or near normal precipitation totals during the winter months across the Pacific Northwest.

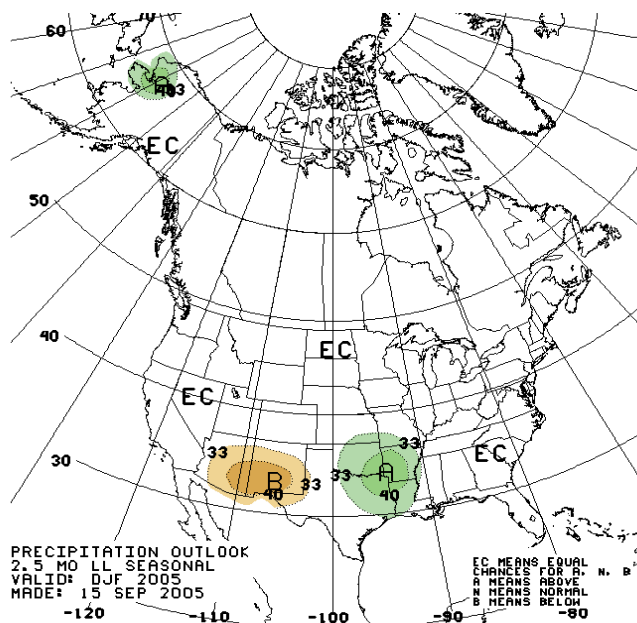
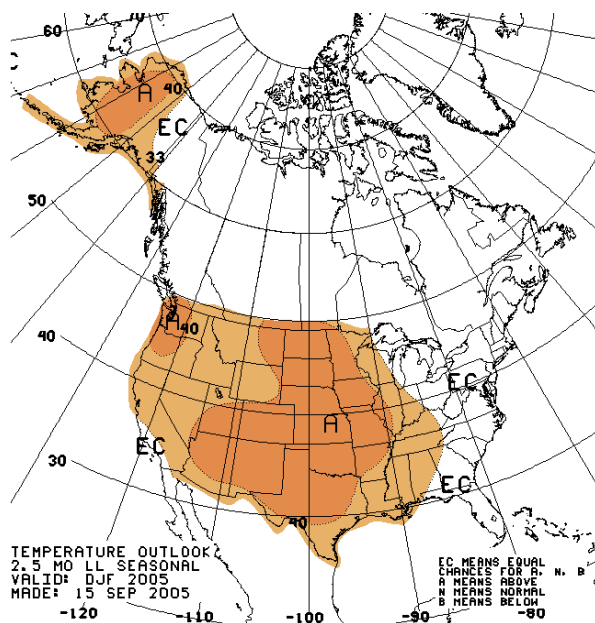
Observed Sea Surface Temperature ($^{\circ}\text{C}$)



Observed Sea Surface Temperature Anomalies ($^{\circ}\text{C}$)



7-day Average Centered on 14 September 2005



Spotter Corner

Estimating Wind Speeds

Just because you don't own an anemometer doesn't mean you can't measure wind speeds. There is a quick way to estimate the wind speed based on the movement of trees and, in the case of extreme winds, damage caused to trees and buildings. Please alert us when you start seeing small branches broken from trees.

32-38 mph : Whole trees in motion. Noticeable resistance walking.

39-46 mph : Twigs and small branches broken from trees.

47-54 mph : Roofing shingles begin blow away. Very difficult to walk.

55-63 mph : Larger trees uprooted, but remain intact.

64-72 mph : Pieces of roofs removed. Larger tree branches broken.

73-85 mph : Trees and power poles broken in half.

86-100 mph : Whole roofs removed. Significant tree damage.

New Spotter Training Sessions this October and November

The National Weather Service has scheduled 5 spotter training sessions this October and November. We encourage all active spotters who have not been to a training seminar in a few years to attend, and help us recruit new members to the spotter community. Perhaps you know a friend or relative who is interested in weather and public service. We are particularly interested in recruiting people residing in more remote areas of the region, where observations are hard to come by. In these training sessions, we will focus on winter severe weather, although we will cover all aspects of significant weather in the Pacific Northwest. We look forward to seeing everyone in the near future.

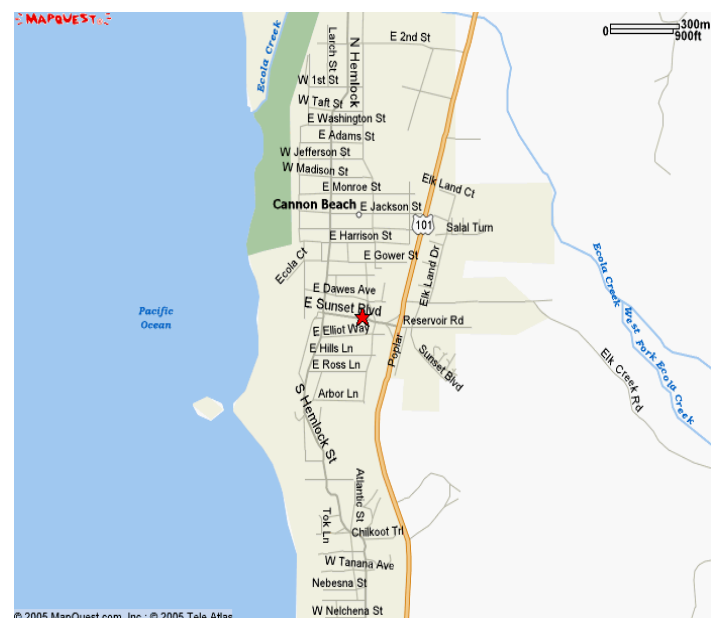
Thursday, October 20th at 7:00 pm

Cannon Beach OR

Cannon Beach Fire Station

188 E Sunset Blvd

Trivia Answer : On Nov 25, 1998, 5.56 inches of rain fell, making it the wettest day in Astoria since records began in 1953.



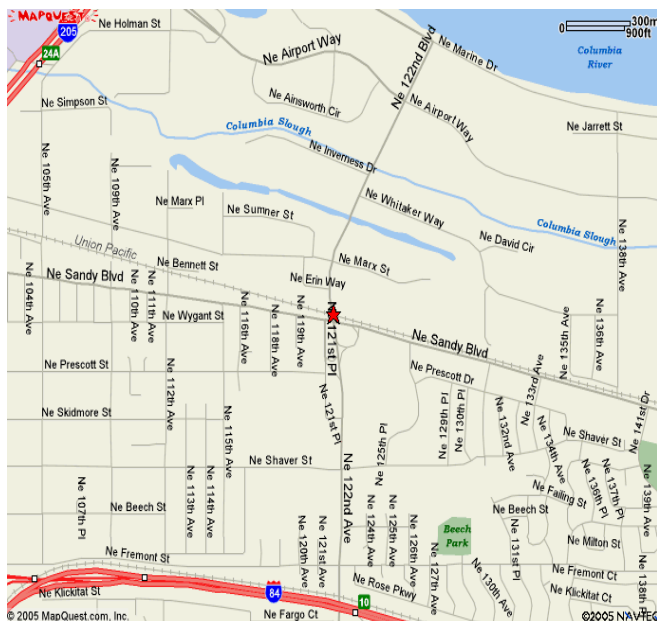
New Spotter Training Sessions this October and November

Wednesday, October 26th at 7:00 pm

Portland, OR

Fire Bureau Training Center

4800 NE 122nd Ave

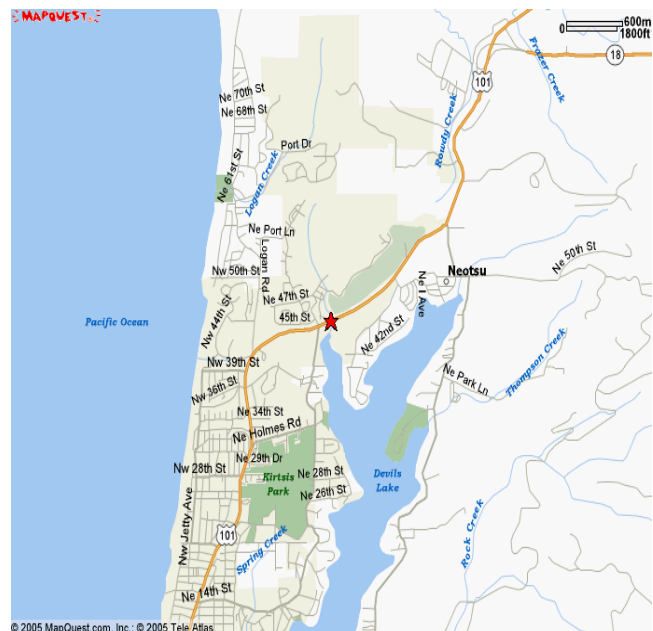


Tuesday, November 1st at 7:00 pm

Lincoln City, OR

Fire Department #1

4520 SE Hwy 101

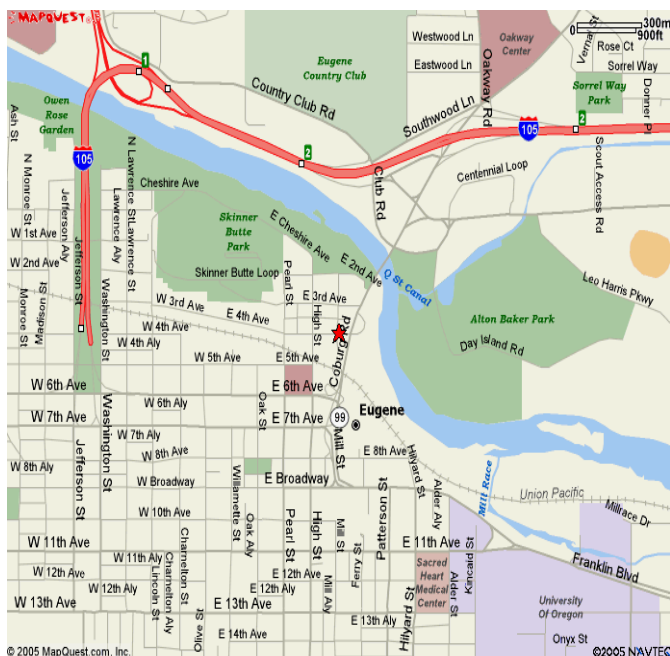


Thursday, November 3rd at 7:00 pm

Eugene, OR

EWEB Training Room

500 E 4th Ave



Tuesday, November 8th at 7:00 pm

Cathlamet, OR

River Street Building

25 River St, Suite D



Winter Severe Weather Spotter Checklist

High Winds : Sustained
winds 40 mph or greater
or gusts over 58 mph

Heavy Rain : Over 1 inch
of rain in a 12 hour
period, or 0.50 inches in
a 1 hour period

Flooding : Any kind of
river flooding

Snowfall : Over 1 inch at
coast or in valleys/Over
4 inches coast range &
foothills/ Over 6 inches
in Cascades

Freezing Rain : Any kind
of accumulation

Heavy Surf : Seas that
are causing beach
erosion

Preparing for an Emergency

The next time disaster strikes, you may not have much time to act. Prepare now for a sudden emergency. Learn how to protect yourself and cope with disaster by planning ahead. This checklist will help you get started. Discuss these ideas with your family, then prepare an emergency plan.

Create an Emergency Plan : Meet with household members. Discuss with children the dangers of fire, severe weather, earthquakes, and other emergencies. Discuss how to respond to each disaster that could occur. Discuss what to do about power outages and personal injuries. Draw a floor plan of your home. Mark two escape routes from each room. Learn how to turn off the water, gas, and electricity at main switches. Post emergency telephone numbers near telephones. Teach children how and when to call 911, police, and fire. Instruct household members to turn on the radio for emergency information. Pick one out-of-state and one local friend or relative for family members to call if they become separated by disaster (it is often easier to

call out-of-state than within the affected area). Teach children how to make long distance telephone calls.

Prepare a Disaster Supply Kit to Include : A supply of water (one gallon per person per day). Store water in sealed, unbreakable containers. Identify the storage date and replace every six months. A supply of non-perishable packaged or canned food and a non-electric can opener. A change of clothing, rain gear, and sturdy shoes. Blankets or sleeping bags. A first aid kit and prescription medications. An extra pair of glasses. A battery-powered radio, flashlight, and plenty of extra batteries. Credit cards and cash. An extra set of car keys. A list of family physicians. A list of important family information; the style and serial number of medical devices, such as pacemakers. Special items for infants, elderly, or disabled family members.

While these steps will not prevent a disaster from happening, it will help your family cope with disaster and the aftermath. Make your plan now before an emergency happens.

Cleaning out your rain gauge

Is your rain gauge covered with black and green algae? Can you barely read the numbers on the side of the gauge? Here are a few tips to clean out your rain gauge for the upcoming winter. Prepare a mixture of warm water and bleach, and soak your gauge in this solution for a few hours. Then, rinse the gauge with hot water. Alternatively, you can fill the gauge with warm water and add a couple denture cleaning tablets. Let the gauge sit for a few hours, then rinse with hot water. These steps should return your gauge back to a nearly new condition.

This is also the time of year when you want to check your rain gauge for leaks. If your gauge leaks, send me an e-mail at mark.omalley@noaa.gov so we can ship you a new gauge.

Hurricane Rita September 2005

